# Notes on *Parornix szoecsi* Gozmany (*Gracillariidae*) and allied species, with description of *P. incerta* n. sp.

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This paper is an attempt to clear up the confusion existing among some species belonging to the genus *Parornix* Spuler: *P. szoecsi* Gozmany, *P. amygdalella* Kuznetzov, *P. turcmeniella* Kuznetzov, *P. atripalpella* Wahlström. Such confusion has been mainly due to the similarities in the genitalia of the males, which can be characterized as follows: *aedoeagus* long and fine, flexible, forked apically, whose base joined, through a short sclerotized piece, with a ventral lobate projection of the sacculus (fig. 4); *valvae* with a tooth on ventral margin. The so far known females have a *corpus bursae* with two *signa* in the shape of bands, formed by small plates.

In the course of the present study I have found other species which are closely related to the mentioned group: *P. ermolaevi* Kuznetzov, *P. maliphaga* Kuz., *P. fumidella* Kuz. However they may be readily distinguished from it because the *aedoeagus* has not the sclerotized piece in the articulation with the *sacculus*, but a real penial apophysis (fig. 10). In addition I have found a new species from Southern Spain, which shows a close affinity to *atripalpella* Wahl. and which is described in this paper.

#### Parornix szoecsi Gozmany

The species was described by Gozmany in 1952, on the basis of a female collected in the surroundings of Budapest. An insufficient description of the genitalia has prevented a correct identification of the species up to now. In 1980 Gozmany sent me some specimens (both sexes) belonging to a species that he thought to be *P. szoecsi*. The slide of the type was not well interpretable and therefore, to solve the problem, I decided to prepare it again. Although the *corpus bursae* was missing, I came to the conclusion that the above-mentioned specimens belong to the species under examination. A description of the female genitalia can now be given (fig. 12): Antapophysis about as long as postapophysis, both rather short. *Laminae antevaginalis* and *postvaginalis* well-defined, each of them

is divided in two. *Ductus bursae* membranous the whole length, *cervix bursae* strongly scobinate. *Corpus bursae* with two signa in the shape of arcuated bands, formed by small plates.

Studying the male genitalia, a synonymy has been ascertained: *P. amygdalella* Kuz. 1978 n. syn. of *P. szoecsi* Gozmany 1952. Kuznetzov described his species only on the grounds of the male genitalia, not having collected any female; so he could not compare the species with the female type of *szoecsi*.

Distribution. Besides the localities mentioned by Gozmany and Kuznetzov (Budapest, South of Ural and West Kazakstan), studying Dr. Kasy's material, I have found a male coming from the Bisamberggebiet (Vienna).

Biology. Gozmany bred his specimens from  $Prunus\ fruticosa\ P.$  and P.  $tenella\ B.$  (=  $Amygdalus\ nanus\ L.$ ). The latter is pointed out by Kuznetzov as the host plant of amygdalella and thus confirms further the synonymy. The species is most likely bivoltine, the adults appearing in June and August.

## Parornix turcmeniella Kuznetzov

This species, very closely related to *szoecsi* Goz., was described by Kuznetzov in 1956 and then described again due to a mistake in the drawing of the *aedoeagus*. An examination of the literature shows that the differences between the two species are slight. Kuznetzov himself (1978) supposed *amygdalella* may be only a subspecies of *turcmeniella*. On the other hand, the very limited variability of the genitalia within this group suggests the possibility that *turcmeniella* is a good species, waiting for new data to clear up the problem.

Distribution. Kopet-Dagh (Turkmenistan).

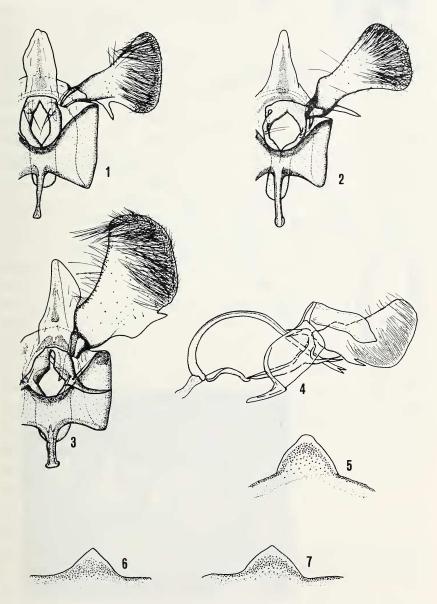
Biology. Unknown.

# Parornix atripalpella Wahlström

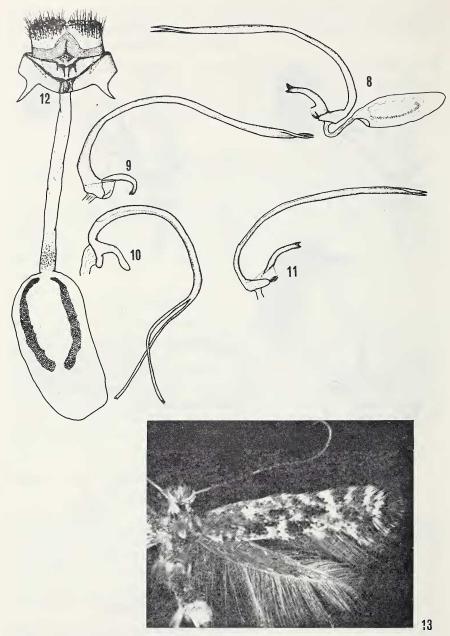
It was described in 1979 on the grounds of a male and a female collected along the south-east coast of Sweden. The genitalia of the males may be distinguished from the two above-mentioned species for the lack of the horn-shaped projections on the *sacculus*.

Distribution. In addition to the locality already mentioned, I have taken the species in Italy, in the surroundings of Bolzano and in Sardinia. In addition, studying the material of the Hartic collection, deposited in the Entomological Institute of Rome University, I have found a specimen labelled: Deutschland, Mai '14, Eichhorn.

Biology. Unknown.



Figs. 1-4. Ø genitalia. 1, Parornix atripalpella Wahl. 2, P. incerta n. sp. 3, P. szoecsi Goz. 4, P. turcmeniella Kuz. (after Kuznetzov 1978).
Figs. 5-7. Eighth sternite. 5, P. szoecsi Goz. 6, P. atripalpella Wahl. 7, P. incerta n. sp.



Figs. 8-11. Aedoeagi. 8, *Parornix atripalpella* Wahl. 9, *P. szoecsi* Goz. 10, *P. ermolaevi* Kuz. (after Kuznetzov 1979). 11, *P. incerta* n. sp. Fig. 12. ♀ genitalia. *P. szoecsi* Goz. Fig. 13. Imago. *P. incerta* n. sp.

Parornix incerta n. sp.

Holotypus (O): Hispania, Sierra Nevada. Carr. Veleta, 2000 m, 8.7.1971, leg. Klimesch (prep. Trb 1154 O), in coll. Klimesch.

Paratypi: 1 o, as above (prep. Trb 1103 o) in coll. Triberti; 1 o, Hispania mer., Prov. Granada, Sierra Nevada, 2300 m, Road to Veleta, 25.7.1979, K. Sattler & D. J. Carter, BM 1970-26, in coll. British Museum.

Description of the adult. Crown and face whitish, with numerous brown scales posteriorly to the scape. Labial and maxillary palpi white, the latter about 1/3 as long as the former. Apical segment of labial palpi is annulated with brown. Antennae ochreous-white, the individual segments annulated with brown; scape and pedicel are slightly spotted with white. Tegulae and thorax whitish, irregularly spotted with brown; coxae and femora of fore and middle legs dark brown, marked with white blotches; on the hind legs they are grey-whitish, each segment with a brown apical ring. Fore wing grey-brownish, with whitish strigulae, typical of the genus Parornix Sp. Hind wing and cilia white-greyish. Expanse of fore wings 7-9 mm.

Male genitalia. Tegumen short, tuba analis membranous, moderate in length. Valvae symmetric, narrowed on basal 1/3 and then widened towards cucullus; costa strongly angulated at basal 1/4; ventrally, at basal 1/4, a tooth is present, about as long as saccus. Sacculus lacking the horn-shaped projection. Aedoeagus long and fine, rather flexible, forked apically; along almost the whole length to the apex, dorsally, a depression is present; such a depression, which is sometimes difficult to distinguish, is present in all the species considered in this work. The base of aedoeagus is provided with a sclerotized curved piece, about as long as saccus and whose distal part, forked, is connected to a ventral lobate projection of the sacculus.

Female genitalia. Unknown.

Distribution. Southern Spain, Sierra Nevada.

Biology. Unknown.

Those species are very similar in colour and general appearance but may be distinguished by the following key which is based upon the male genitalia:

1. Sacculus with horn-shaped projection

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- Sacculus without such projection

szoecsi Goz.

- 2. Ventral margin of *valvae* strongly convex Ventral margin of *valvae* weakly convex
- turcmeniella Kuz.

- 3. Valva strongly angulated at basal 1/3; cucullus symmetric; tooth is present on basal 1/4 incerta n. sp.
- Valva almost straight; cucullus asymmetric, tooth is present at about half length of the valva atripalpella Wahl.

On this occasion I wish to thank Dr. F. Kasy (Naturhistorisches Museum, Vienna), Dr. K. Sattler (British Museum, London), Dr. J. Klimesch (Linz) and Prof. A. Vigna Taglianti (Istituto di Zoologia dell'Università di Roma) for having allowed me to study their valuable collections.

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# Summary

The Author considers four species belonging to the genus *Parornix* Spuler: *P. szoecsi* Gozmany, *P. amygdalella* Kuznetzov, *P. turcmeniella* Kuz., *P. atripalpella* Wahl. For each of them a description of the genitalia, the distribution and the biology, if known, are given. A new synonymy is ascertained: *P. amygdalella* Kuz. is a synonym of *P. szoecsi* Goz. In addition *P. incerta* n. sp. is described from Southern Spain.

## Riassunto

L'Autore prende in esame quattro specie appartenenti al genere *Parornix* Spuler: *P. szoecsi* Goz., *P. amygdalella* Kuz., *P. turcmeniella* Kuz., *P. atripalpella* Wahl. Per ognuna di esse è data la descrizione delle armature genitali, la distribuzione e la biologia, dove essa è conosciuta. Viene accertata una nuova sinonimia: *P. amygdalella* Kuz. è sinonimo di *P. szoecsi* Goz. Inoltre, viene descritta *P. incerta* n. sp., proveniente dal sud della Spagna.